REMARKS

Counsel for the Applicant would like to thank the Examiner for the opportunity to discuss over the telephone specific concerns of the Applicant. During the conversation of August 4, 1993, the Examiner and the undersigned attorney discussed the rejection of Claims 56 and 62 under 35 U.S.C. §112, first paragraph, rejection of Claims 53-62 under 35 U.S.C. §101, and rejection of Claims 56 and 62 under the doctrine of obviousness-type double patenting.

Applicant notes that the Examiner has received all relevant references and that the page numbering of the Form PTO-1449 submitted October 13, 1992 was merely misidentified.

1. Restriction Requirement Under 35 U.S.C. §121

The Examiner restricted the present application to one of the following inventions: (I) Claims 9, 14-19 and 63-68, drawn to a process of raising an animal, classified in Class 426, subclass 002; (II) Claims 20-36, drawn to a process of producing omega HUFAs by culturing a microorganism, classified in Class 435, subclass 135; (III) Claims 42-49, drawn to a process of selecting unicellular aquatic microorganisms, classified in Class 435, subclass 243; and (IV) Claims 53-62, drawn to a food product from the growth of microorganisms, classified in Class 426, subclass 053.

In Applicant's Response to the Restriction Requirement dated May 4, 1993, a provisional election was made, with traverse, to prosecute the invention of Group IV, Claims 53-62.

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Applicant affirms this election. Claims 9, 14-36, 42-49, and 63-68 are withdrawn from further consideration under 37 CFR §1.142(b), as being drawn to a non-elected invention.

In a supplemental restriction requirement, the Examiner restricted the present application in view of newly submitted Claims 69-71. The Examiner contends that Claim 69, drawn to an animal, is non-statutory subject matter. Applicant respectfully disagrees because the Examiner indicates that Claim 69 falls within Class 800, subclass 2. As such, Applicant understands that Claim 69 is withdrawn from consideration as a restricted claim.

The Examiner also restricted Claims 70 and 71: (Species A) Claims 70 and 71 drawn to a food product from animals or produced by animals which have been raised on a particular lipid feed and (Species B) Claims 53-62 drawn to a food product comprising said lipid and a food material.

During a telephone conversation between Examiner Weier and the undersigned attorney on August 4, 1993, a provisional election was made with traverse to prosecute the invention of species B, Claims 53-62. Applicant affirms this election. Claims 69-71 are withdrawn from further consideration under 37 CFR §1.142(b), as being drawn to a non-elected invention.

2. Rejection of Claims 56 and 62 under 35 U.S.C. §112, first paragraph.

The Examiner rejected Claim 56 on the basis that the specification does not provide support for a sodium concentration of less than about 8.58. However, support does

exist for "less than 6.58." Applicant has corrected this typographical error by amending Claim 56 to include a sodium concentration of less than about 6.58 g/l.

The Examiner rejected Claim 62 as being indefinite because the original specification does not provide support for said material having an absence of a fishy odor. Applicant draws the attention of the Examiner to page 30, lines 6-14 and lines 19-23 of the specification, which state, "the microbial product of the present invention can be used as a food or feed supplement to provide an improved source of omega-3 highly unsaturated fatty acids which has significant advantages over conventional sources. Poultry fed a diet supplemented with the microbial product incorporate the omega-3 highly unsaturated fatty acids into body tissues and into eggs. The eggs exhibit no fishy odor or taste, no change in yolk color. . . . The eggs and flesh of poultry fed according to the invention are useful in human nutrition as sources of omega-3 highly unsaturated fatty acids, yet are low in omega-6 fatty acid content and lack a fishy flavor." The extracted lipids of the present invention lack a fishy flavor because they are direct microbial products. The food product as claimed in Claim 62 excludes food products having fishy odors because the extracted lipids of the claimed food product do not have a fishy odor and the claim further requires that the recited food material not have a fishy odor. As such, Applicant requests that rejection of Claim 62 be withdrawn.

3. Rejection of Claims 53-62 Under Statutory Double Patenting.

The Examiner has rejected Claims 53-62 as claiming the same invention as that of Claims 1-5 and 7-10 of prior U.S. Pat. No. 5,130,242. As noted in the telephone conversation of August 4, 1993, Applicant respectfully submits that the claims identified by the Examiner from U.S. Pat. No. 5,130,242 are drawn to a food product with whole cell microorganisms, while Claims 53-62 in the present case are drawn to a food product with lipids extracted from microorganisms. As such, Claims 53-62 of the present invention do not fall within the claim scope of Claims 1-5 and 7-10 of prior U.S. Pat. No. 5,130,242. Applicant therefore requests that the statutory double patenting rejection of Claims 53-62 be withdrawn.

4. Rejection of Claims 56 and 62 Under the Doctrine of Obviousness-Type Double Patenting.

The Examiner rejected Claims 56 and 62 under judicially created obviousness-type double patenting over Claims 2, 3, and 8 of U.S. Pat. No. 5,130,242. Regarding Claim 56, it is believed that this rejection only applies to Claim 56 if the value of 8.58 in the original claim was not a typographical error. As noted above, Claim 56 has been amended to change this value to 6.58. Thus, it is believed that this rejection no longer applies to Claim 56.

The Examiner indicates that while Claim 62 is not identical, it is not patentably distinct because it would have been obvious to one of ordinary skill in the art to have

employed a food material which is fish or has the odor of fish. An indefinite number of food materials do not have such an odor and the use of foods other than those which possess a fish odor would have been an obvious determination dependent upon one's personal preference.

Applicant respectfully submits that Claim 62 is not subject to obviousness-type double patenting primarily on the basis that Claim 62 incorporates the limitation in preceding Claim 53 that the food product include extracted lipids rather than whole cell microorganisms as is claimed in U.S. Patent No, 5,130,242. Applicant submits that it would not have been obvious over Claims 2, 3, and 8 of U.S. Pat. No. 5,130,242 to extract lipids from the microorganisms to produce the claimed food product because extraction of lipids can cause significant problems. For example, upon extraction, lipids from microbial products such as those produced by the present process can be exposed to oxidizing conditions and converted to less desirable fatty acids or to saturated fatty acids (see page 18, lines 29 through 32 of the specification). The present disclosure, however, teaches the use of various strategies to prevent oxidation of lipids when extracting them to make the novel product of Claims 53-62. For example, the discussion on p. 19 of the application identifies various methods for addressing the problem of oxidation during processing steps, such as extraction. As such, it would not be obvious to modify the food product claimed in Claims 2, 3, and 8 of U.S. Pat. No. 5,130,242 by extracting

lipids from the claimed microorganisms to make the food product of the present invention because of the risk of oxidation of the extracted lipids.

In view of the foregoing remarks, Applicant respectfully submits that Claims 53-62 are in condition for allowance and Applicant respectfully requests the same.

No fees are believed to be due with this Amendment and Response. In the event that fees are due, please debit Deposit Account 19-1970.

Respectfully submitted,

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